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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,812	01/29/2001	Wolfgang F. Ruettinger	4739	1300

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EXAMINER

LANGEL, WAYNE A

ART UNIT

PAPER NUMBER

1754

DATE MAILED: 05/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/17/812

Applicant(s)

Ruettinger et al

Examiner

Langel

Group Art Unit

1754

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

P riod for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

☒ Responsive to communication(s) filed on 4-21-03

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 1, 4-6, 8-23 and 42-44 is/are pending in the application.

Of the above claim(s) 24-41 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1, 4-6, 8-23 and 42-44 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

P riority under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☐ All ☐ Some* ☐ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. _____.

☐ Copies of the certified copies of the priority documents have been received

in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of Reference(s) Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other _____

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) The invention was described in (1) an application for patent, published under Section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-6, 8-23 and 42-44 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Baumann et al. (newly cited). Baumann et al. disclose a method for converting carbon monoxide with water to form hydrogen comprising passing the gas mixture

over a shift catalyst for carbon monoxide conversion, wherein the shift catalyst may be platinum supported on an oxide support material selected from the group consisting of aluminum oxide, silicon dioxide, titanium dioxide, rare earth oxides and zeolites. (See column 7, line 60 - column 8, line 9.) Baumann et al. teach at column 8, lines 17-22 that the oxide support material is doped with a redox-active oxide of a metal selected from the group consisting of cerium, zirconium, titanium, vanadium, manganese and iron. Baumann et al. also disclose at column 4, lines 50-53 that the catalyst may comprise platinum together with copper as well as cerium oxide on finely divided aluminum oxide, and further disclose at column 4, lines 20-27 that the support material should have a specific surface of more than 10 m²/g. The catalyst of Baumann et al. would have a low-pyrophoricity, since Example 1 in column 6 of Baumann et al. discloses that the catalyst was prepared by impregnation.

Claims 1, 4-6, 8-10 and 44 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Korotkikh et al. Korotkikh et al. disclose a process for carrying out the water gas-shift reaction, wherein the catalyst for the reaction comprises aluminum oxide having a surface area of at least 10 m²/g, platinum as the catalytic agent, and a promoter comprising one or more of cerium oxide, neodymium oxide, praseodymium oxide and iron oxide. (See

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column 3, lines 12-31.) There is no "description support" in parent application Serial No. 09/669,044 for claims 1, 4-6, 8-10 and 44. For example, there is no "description support" for employing an oxide of chromium, vanadium or molybdenum as the reducible metal oxide, or for employing gold as the catalytic agent in the parent case. Accordingly the earliest effective filing date that can be accorded these claims is the filing date of the instant application (January 29, 2001), and Korotkikh et al. is properly available as prior art, since it has an effective filing date of September 25, 2000.

Claims 1 and 4-6 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, the recitation of "selected from the group consisting of . . . or" is improper Markush terminology. The following changes would obviate this rejection. In claim 1, line 6, "a" should be changed to --at least one--. In line 7, the phrase "one or more of" should be deleted and "or" should be changed to --and--. In the last line, "or" should be changed to --and--.

Chintawar et al. is made of record for disclosing a process for converting carbon monoxide and water into carbon dioxide and hydrogen by employing a water gas shift catalyst comprising platinum supported on zirconium oxide.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne A. Langel whose telephone number is (703) 308-0248. The examiner can normally be reached on Monday through Friday from 8 A.M. to 3:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on (703) 308-3837. The fax phone number for this Group is (703) 305-7718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2351.

WAL:cdc

May 27, 2003


WAYNE A. LANGEL
PRIMARY EXAMINER